

EXHIBIT 1



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Diseases
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Re: Nicolet Law Claimants - Salmonella Newport

Dear Ms. Lien

You have asked me to review medical records and other information for seven individuals and render an expert opinion on the potential causality between Salmonella Newport and gastrointestinal disease and other associated symptoms. You have also asked me to comment on the appropriateness of the treatment received by these individuals, including the reasonableness of the medical bills for the treatment.

Qualifications

I am board certified in Infectious Disease and have been practicing as an academic faculty member at the University of California Los Angeles between 2013-2023 and at University of Texas Southwestern Medical Center (UTSW) since June 2023. My clinical practice has focused on outpatients and inpatients with complicated infectious disease problems as an attending physician on the Infectious Disease Consult Service. In addition, I run a research laboratory at the University of Texas Southwestern Medical Center that studies molecular mechanisms of immunopathogenesis of infectious diseases. I have published over 160 papers in the field of infectious diseases. As my Curriculum Vitae demonstrates, I have specifically published on gastrointestinal manifestations related to infectious diseases. I have had extensive training and experience in infectious diseases throughout my career as described in detail in my Curriculum Vitae. As such, I have a detailed understanding of the pathogenesis and clinical manifestations of Salmonella infections. I have reviewed all exhibits. I have not met with, spoken to, or examined the petitioners. In addition to the exhibits, I also reference published articles as resources as indicated.

Salmonella gastroenteritis (evidence from (1))

Overview: Salmonellae cause a broad range of infections, including gastroenteritis, enteric fever, bacteremia, endovascular infections, and focal infections such as osteomyelitis and abscesses although there are many types of *Salmonella*, they can be divided into two broad categories: those that cause typhoid and enteric fever and those that primarily induce gastroenteritis:

- The typhoidal *Salmonella*, such as *Salmonella* Typhi or *Salmonella* Paratyphi primarily colonize humans, are transmitted via the consumption of fecally contaminated food or water and cause a systemic illness usually with little or no diarrhea.
- The much broader group of nontyphoidal *Salmonella* usually results from improperly handled food that has been contaminated by animal or human fecal material. It can also be acquired via the fecal-oral route, either from other humans or farm or pet animals. Nontyphoidal salmonellae are a major cause of diarrhea worldwide. In the United States, nontyphoidal salmonellosis is a leading cause of foodborne disease. Frequently isolated serotypes include *S. Enteritidis*, *S. Newport*, and *S. Typhimurium*

Most cases of human salmonellosis are almost entirely limited to the serotypes of subspecies *Salmonella enterica*, with the top five serotypes responsible for human disease being *S. Enteritidis*, *S. Typhimurium*, *S. Infantis*, *S. Stanley*, and *S. Newport*; most human infections due to non-*enterica* subspecies develop in adults with weakened immune systems. Rates of antibiotic resistance among several serotypes have been increasing and are an area of significant concern; a substantial proportion of *S. Typhimurium* and *Salmonella newport* isolates are multidrug resistant.

Pathogenesis: *Salmonella* is most commonly associated with the ingestion of poultry, eggs, and milk products. Other associations include fresh produce, meats, and other foods, as well as contact with pets (including reptiles) and other animals. Data on the number of *Salmonella* organisms required for clinical illness

have been obtained from studies on human volunteers and outbreaks in which the vehicle of inoculation was quantitatively cultured. Large inocula ($>10^4$) produce higher rates of illness after shorter incubation periods than small inocula ($\leq 10^3$). Asymptomatic excretion may occur after ingestion of small inocula, although even very small inocula (5 to 100 organisms) may cause disease in susceptible hosts. Antibiotic use can reduce the infectious dose necessary to cause disease by diminishing the normally protective indigenous flora. The infectious dose is lower in patients with clinical conditions associated with a reduction in gastric acidity such as neonates and **the use of antacids** or H₂ blockers. Water supplies are contaminated at lower levels than food, resulting in lower attack rates and longer incubation periods in waterborne outbreaks. *Salmonella* may persist for months in cheese, frozen meat, or ice cream.

Clinical manifestations of non-typhoidal salmonellosis

Incubation period — Symptoms of *Salmonella* gastroenteritis typically occur within 8 to 72 hours following exposure (which usually consists of ingestion of contaminated food or water). Longer incubation periods have been reported in some outbreaks; this may be attributable to a lower bacterial dose.

General features — Gastroenteritis due to salmonellae is clinically indistinguishable from gastroenteritis caused by many other pathogens. The cardinal features include diarrhea, nausea, vomiting, fever, and abdominal cramping. A higher ingested dose of bacteria correlates with the severity of diarrhea, the duration of illness, and weight loss. The diarrhea is typically not grossly bloody, although bloody stools can be seen, particularly among children. Other constitutional symptoms (fatigue, malaise, chills) and headache are also commonly described. Enteric infection with nontyphoidal salmonellae may be clinically mild or have complications.

Clinical course — Nontyphoidal *Salmonella* gastroenteritis is usually self-limited. Fever generally resolves within 48 to 72 hours, and diarrhea resolves within 4 to 10 days. Mortality rates of 0.5 to 1 percent have been reported in outbreaks of *S. Enteritidis*, but these are most likely overestimates since milder cases tend to be unrecognized. Following acute infection, the median duration of intermittent stool shedding is approximately five weeks.

Complications/invasive disease — Fewer than 5 percent of individuals with documented *Salmonella* gastroenteritis develop bacteremia. Bacteremia can lead to a variety of extraintestinal manifestations such as endocarditis, mycotic aneurysm, visceral abscesses, and osteomyelitis. *Salmonella* meningitis is a rare complication that typically occurs in neonates and children ≤ 1 year of age. In addition, outbreaks of salmonellosis in neonatal intensive care units and maternity wards have been described.

Some serotypes appear to be more invasive than others; however, clinical manifestations attributable to a particular serotype may be variable, geographically and temporally.

Complications of non-typhoidal salmonella invasive disease, such as focal abscesses, meningitis, osteomyelitis, lung infections, and septic arthritis, can be severe, debilitating, and life-threatening (2). Chronic post infectious sequelae such as irritable bowel syndrome (IBS) post salmonella infection is a well described clinical entity(3).

Medical and Scientific Opinion

Based on my training and experience it is my opinion that the *Salmonella* Newport is more likely than not the cause of gastrointestinal disease and other associated symptoms in Colin Strub, Jody Barry, Lori Davies, Lynnetta Klam, Peterson Matthew, Floding Sadie and Teisha Benson. I hold all opinions to a reasonable degree of medical certainty.

I reserve the right to supplement or amend these opinions upon receipt of additional information.

Colin Strub

Colin Strub is a 45-year-old man who lives in Colorado. I reviewed the following records regarding this case:

BATES	DESCRIPTION
STRUB0005	Denver Digestive Health Specialists Letter
STRUB0006- STRUB0027	Colorado Health Dept Records
STRUB0028- STRUB0033	Denver Digestive Health Bills
STRUB0038- STRUB0068	Denver Digestive Health Records
STRUB0070	Denver Endoscopy Center Bill
STRUB0079- STRUB0107	Denver Endoscopy Center Records
STRUB0108- STRUB0120	Kaiser Permanente Records
STRUB0121- STRUB0126	Kaiser Permanente Bills
STRUB0127- STRUB0476	Kaiser Permanente Records
STRUB0483- STRUB0490	UC Health Bills
STRUB0491- STRUB0589	UC Health Records
STRUB0570- STRUB0576	University of Colorado Hospital Bills
STRUB0577	Lab results – CO Dept of Public Health
STRUB0580- STRUB0583	Rose Surgical Center Records from 2016
STRUB0586- STRUB0629	Denver Digestive Health Records
STRUB0631- STRUB0750	Saint Joseph Hospital Records
STRUB0751- STRUB0754	Saint Joseph Hospital Bills
STRUB0755- STRUB0782	UC Health Records
STRUB000793-STRUB000797	Chart messages with Dr. Schultz
STRUB809	CDC spreadsheet
STRUB810	CDC spreadsheet
STRUB811	CDC spreadsheet
STRUB000823	Physical Therapy Specialists Stool Chart
STRUB000824	Physical Therapy Specialists Stool Chart
STRUB000825	Physical Therapy Specialists Stool Chart
TII000047843-TII00047911	Rose Surgical Center Records
TII00047912	Rose Surgical Center Bill
STRUB00826-STRUB00919	Physical Therapy Specialists Medical bills and records
Deposition Transcript	Deposition Transcript

He has a past medical history notable for Gastroesophageal reflux disease (GERD) with esophagitis and Shatzkis ring.

The clinical presentation of Colin Strub is consistent with infection from Salmonella Newport. This is based on history, clinical and microbiological evidence.

He presented on 6/25/20 with diarrhea, bloating, headache. He had numbness and neurological symptoms in toes and hand on 6/23 and the combination of neurological symptoms with gastroenteritis is characteristic of Salmonella infections(4). On 7/8/20 the stool culture was positive for Salmonella spp not typhi and on 7/30 Salmonella Newport serotype C2 was identified.

His acute treatment was mostly supportive (hydration, monitoring). His primary care physician (PCP) prescribed him an antibiotic called ciprofloxacin, but the gastrointestinal specialist told Mr Strub not to take it because it may prolong the symptoms of his illness. Mr Strub has also been on omeprazole for treatment of his GERD. Use of omeprazole, a proton pump inhibitor (PPI) is associated with an increased risk of bacterial gastroenteritis such as Campylobacter and Salmonella infections(5, 6). Salmonella species have been found to respond to low pH by developing adaptive mechanisms that allow survival in acid environments(6). Furthermore, PPIs change the gut flora, which provides protection against ingested pathogens (6). PPIs also reduce the antibacterial activity of neutrophils which may facilitate Salmonella and Campylobacter infections (6).

The patient developed post infectious irritable bowel syndrome (IBS), bloating and pain for years. Irritable bowel syndrome post salmonella infection is a well described clinical entity(3).

Thus, based on the history, clinical, epidemiological and microbiological evidence, the acute symptoms and ongoing post-infectious IBS symptoms in this case were consistent with infection from Salmonella Newport to a reasonable degree of medical certainty.

I have also reviewed bills that correspond to his treatment and find that they reflect charges for reasonably necessary care.

It is expected that he may continue to have chronic symptoms of post-infectious IBS and he will have bills related to treatment of these symptoms (such as physical therapy) and assessments with specialists that manage IBS. Even with treatment, it is likely that IBS symptoms will continue indefinitely into the future.

Jody Barry

Jody Barry is a 52-year-old woman who resides in Gresham, Oregon. I reviewed the following documents:

BATES	DESCRIPTION
BARRY0001- BARRY0022	Oregon Health Dept Records
BARRY0023- BARRY0081	Legacy Mount Hood Medical Records
BARRY0082- BARRY0089	GoHealth Medical Records
BARRY0093- BARRY0094	Legacy Mount Hood Bills
BARRY0097- BARRY0099	GoHealth Bills
BARRY0126- BARRY0141	Mountain View Bills
BARRY0142- BARRY0498	Mountain View Records
BARRY0512- BARRY0606	NORS report
BARRY0607	Excel from CDC
BARRY0608	LineList
BARRY0609	PNUSAS155423
BARRY0610	FOIA linelist
BARRY0611	FOIA linelist highlights
Deposition Transcript	12-21-23 Barry_Bundle with Exhibits_CERTIFIED TRANSCRIPT (blue)

The clinical presentation of Jody Barry is consistent with infection from Salmonella Newport. This is based on history, clinical and microbiological evidence. Ms. Barry reported exposure to multiple food items containing onions prior to illness onset.

Ms. Barry became ill on approximately July 10, 2020. She presented to Legacy Mount Hood Medical Center on July 14, 2020, with persistent nausea, diarrhea, abdominal pain, upset stomach, chills, fever, nausea, vomiting and diarrhea. She has had blood and mucus in her stools. She had colitis on imaging and a positive stool culture for Salmonella within 48 hrs since ingestion of food with onions (salsa vs breakfast burrito). Urine culture was also positive for Salmonella suggesting high burden of disease in the setting of urinary incontinence with diarrhea.

Ms. Barry remained ill into August 2020, reporting elevated stress and fatigue. Based on the National Outbreak Reporting System (NORS Report), the source of infection was tracked back to Red, white, yellow, sweet onions from Thomson International Farm USA CA. The case of Mrs Barry was recorded as Salmonella Newport 2007MLJJP (CASE ID 20227927).

The overall presentation (nausea, diarrhea, abdominal pain, chills, fever, blood and mucus in the stool) was consistent with Salmonella dysentery. Thus, based on the history, clinical, epidemiological, imaging (colitis) and microbiological evidence, to a reasonable degree of medical certainty, the symptoms in this case were consistent with infection from Salmonella Newport.

I have also reviewed bills that correspond to her treatment and find that they reflect charges for reasonably necessary care.

Lori Davies

Lori Davies is a woman who resides in Portland, Oregon. I have reviewed the following documents:

BATES	DESCRIPTION
DAVIES0004- DAVIES0022	Washington County Health Department
DAVIES0023	TRG, LLC Bill (Formerly: The Radiology Group)
TII000045027-TII000045479	Rebound, Division of Northwest Surgical Specialists records
DAVIES0130- DAVIES0131	Northwest Surgical Specialists Bills
DAVIES0137- DAVIES0153	Allergy, Asthma and Dermatology Associates Records
DAVIES0155- DAVIES0213	Providence Bills
DAVIES0214	NW Dermatology Bill
DAVIES0219- DAVIES0222	NW Dermatology Records
DAVIES0223- DAVIES0231	Hair photos before and after
DAVIES0239	Genetic results
DAVIES0240	Oregon Clinic Colonoscopy results
DAVIES0241- DAVIES0244	BioLounge Bills
DAVIES0245- DAVIES0252	BioLounge Records
DAVIES0253- DAVIES0259	Providence Bills
DAVIES0260- DAVIES0601	Providence Records
TII000045480-TII000045483	TRG, LLC bill
DAVIES0611-DAVIES0701	NORS report
DAVIES0702	CDC spreadsheet
DAVIES0703	CDC spreadsheet
DAVIES0704	CDC spreadsheet
TII000045016-TII000045026	NW Surgical Specialists Bills
TII00067251-TII00067276	NW Rheumatology Associates Records
TII00067279- TII00067295	The Oregon Clinic Records (post Salmonella colonoscopy/polyps)
Deposition Transcript	1-11-24 Davies_Bundle with Exhibits_CERTIFIED TRANSCRIPT (blue)

Ms Davies has a past medical history of autoimmunity, breast implants, bronchitis, rhinosinusitis, drug, food and seasonal/environmental allergies, ear infections, eczema, and immune deficiency. She also has a history of mast cell activation syndrome since insertion of breast implants that improved after removal of the breast implants on fall of 2021.

The clinical presentation of Lori Davies is consistent with infection from Salmonella Newport. This is based on history, clinical and microbiological evidence. She became ill in early July 2020. On July 10, 2020, she presented to a local emergency room. She presented with fever, diarrhea, nausea, chills, body aches fever and got admitted for dehydration, tachycardia low oxygen and blood pressure. Mrs. Davies had developed sepsis and was admitted for further care.

A stool specimen from 7/11/20 showed Salmonella Newport. She was discharged on July 12, 2020. She followed up with her primary care provider Dr. Karl Kaluza on July 31 and August 24, 2020, reporting symptoms consistent with post-sepsis syndrome.

Following her illness, Mrs. Davies reported many symptoms that she had not experienced prior to her illness. Mrs. Davies developed hair loss after Salmonella infection. The gut-skin connection in hair loss has been established and postinfectious dysbiosis of the gut (altered microbiome) after acute gastroenteritis can contribute to pathogenesis of hair loss (7).

The patient developed post infectious irritable bowel syndrome (IBS), bloating and pain for years. Irritable bowel syndrome post salmonella infection is a well described clinical entity(3). Although post infectious IBS has unknown pathogenesis and is not considered an autoimmune disease, it is established that the immunity system has a major role in development of IBS and potentially IBS can worsen autoimmunity(8).

Based on Dr. Kursteen Price's assessment on February 2022, the allergic symptoms (angioedema, malaise, bloating, cramping, urticaria) were reported as being moderate and occurred randomly in the setting of aggravating factors such as stress, injury, infection, allergy drugs foods, inhalants. She also has history of polyarthritis (hands, feet, legs) that worsened after Salmonella infection on July 2020 based on the assessment of Dr. Kursteen Price on February 2022.

Salmonella infection can also worsen mast cell activation (MAS) that patient already had in the setting of her breast implants before the exposure to Salmonella. Mast cells localize to mucosal tissues and contribute to innate immune defense against infection. In addition to their well-known involvement in allergy, mast cells take part in the host response to a wide variety of infections including Salmonella infection (9). Salmonella infection can direct contribute to activation of mast cells during infection and can worsen MAS symptoms (9).

Thus, the worsening of chronic gastrointestinal symptoms after Salmonella infection in Ms. Davies could be multifactorial in the setting of both IBS and MAS.

Thus, based on the history, clinical, epidemiological, and microbiological evidence, the symptoms in this case were consistent with infection from Salmonella Newport to a reasonable degree of medical certainty.

Future treatment for IBS might include visits to specialists who treat IBS and treatments for IBS such as management of associated psychological disorders, antibiotics, opioid agonists / antagonists, bile acid sequestrants, and antagonists of serotonin 5- hydroxytryptamine type 3 receptors, microbiome treatments such as probiotics, prebiotics, synbiotics as well as fecal microbiota transplantation (10, 11). Even with treatment, it is likely that IBS symptoms will continue indefinitely into the future.

I have also reviewed bills that correspond to her treatment and find that they reflect charges for reasonably necessary medical care.

Lynnetta Klam

Ms. Klam is a woman from Alberta, Canada. She has a noted past medical history of breast cancer, and depression and bipolar disorder. She has a family history of Crohn's disease. I have reviewed the following documents:

Lynnetta Klam

BATES	DESCRIPTION
KLAM00017-KLAM00031	South Common Medical Centre Records
KLAM00032-KLAM00040	Royal Alexandra Records
KLAM00041-KLAM00044	University of Alberta Records
KLAM0047-KLAM0079	Montgomery – Peak Medical Specialty Centre Records
KLAM000080- KLAM000123	Dr. Gaunt Records
KLAM0000124- KLAM000141	Royal Alexandra Records
KLAM000458- KLAM000500	Foothills Medical Centre Records
TII000063549-TII000063557	Alberta Health Services Records
TII00067214-TII00067222	Gastroenterology Internal Medicine Records
Deposition Transcript	1-19-24 Klam_Bundle with Exhibits_CERTIFIED TRANSCRIPT (blue)

The clinical presentation of Lynnetta Klam is consistent with infection from Salmonella Newport. This is based on history, clinical, imaging and microbiological evidence. In early July 2020 she became ill with fever, bloody diarrhea and abdominal pain. After a phone consultation with South Common Medical Centre on July 13, 2020, she was referred to the hospital. CT imaging showed mild diffuse colitis. Stool specimen from 7/14/20 showed Salmonella Newport.

Due to underlying history of colitis, she underwent colonoscopy on 8/4/20 that showed rectosigmoid colitis. Biopsies were negative for inflammatory bowel disease.

The patient developed post infectious irritable bowel syndrome (IBS), bloating and pain for years. Irritable bowel syndrome post salmonella infection is a well described clinical entity(3). Of note, Ms. Klam had a similar presentation with bloody diarrhea and fevers on 8/29/22 and colonoscopy at that time again ruled out inflammatory bowel disease. Clinical impression was that this episode was again left limiting infectious gastroenteritis and not inflammatory bowel disease. This is relevant to the clinical presentation on July 2020 since inflammatory bowel disease was in the differential diagnosis and initial impression based on colonoscopy was that there was possible inflammatory bowel disease (however biopsies ruled out this diagnosis). Thus, all gastrointestinal symptoms in Ms. Klam can be attributed exclusively to Salmonella infection and not other alternative diagnosis.

Thus, based on the history, clinical, epidemiological, imaging and microbiological evidence, the symptoms in this case were consistent with infection from Salmonella Newport to a reasonable degree of medical certainty.

Future treatment for IBS might include visits to specialists who treat IBS and treatments for IBS such as management of associated psychological disorders, antibiotics, opioid agonists / antagonists, bile acid sequestrants, and antagonists of serotonin 5- hydroxytryptamine type 3 receptors, microbiome treatments such as probiotics, prebiotics, synbiotics as well as fecal microbiota transplantation (10, 11). Even with treatment, it is likely that IBS symptoms will continue indefinitely into the future.

Matthew Peterson

Matthew Peterson is a 39-year-old man who lives in Oregon. He has a past medical history of back pain, night sweats, and smoking (quit in 2009). I have reviewed the following documents:

Matthew Peterson

BATES	DESCRIPTION
PETERSON002-PETERSON004	Kaiser Permanente Bills
PETERSON0009- PETERSON0037	Kaiser Permanente Records
PETERSON0038	Kaiser Permanente Bill
PETERSON0039- PETERSON0061	Oregon Health Department Records
PETERSON0088-PETERSON0108	Kaiser Permanente Records
PETERSON0134-PETERSON0162	Kaiser Permanente Records
TII000045484-TII000045493	Kaiser Permanente Bills
TII000045504	Kaiser Permanente RX Bills
Deposition Transcript	PENDING RECEIPT

The clinical presentation of Matthew Peterson is consistent with infection from Salmonella Newport. This is based on history, clinical, imaging and microbiological evidence. On July 3, 2020, he presented with diarrhea and abdominal pain. Stool specimen from 7/3/20 showed Salmonella Newport.

He had a triage follow up on August 5, 2020, reporting ongoing diarrhea, weight loss, nausea, and joint pain. On August 7, 2020, he had a follow up phone visit with Dr. Raagav Mohanakrishnan. Given the ongoing diarrhea, the doctor recommended repeated stool studies and a colonoscopy referral.

Thus, based on the history, clinical, epidemiological, and microbiological evidence, that the symptoms in this case were consistent with infection from Salmonella Newport to a reasonable degree of medical certainty.

I have also reviewed bills that correspond to his treatment and find that they reflect charges for reasonably necessary medical care.

Sadie Floding

Sadie Floding is a 31-year-old woman from Montana. She has a past medical history notable for unresolved gastrointestinal pain. I have reviewed the following documents:

BATES	DESCRIPTION
FLODING0001	Linelist
FLODING00461-FLODING00484	Montana Health Dept Records
FLODING00485-FLODING00488	Lewis and Clark Medical Bills and St. Peter's Hospital Bills
FLODING00489-FLODING00493	St. Peter's Records
FLODING00494	St. Peter's Bills
FLODING00504-FLODING00555	St. Peter's Records
FLODING001485	CDC spreadsheet
FLODING001486	CDC spreadsheet
FLODING001487	CDC Spreadsheet
Deposition Transcript	1-17-24 Merkel_Bundle with Exhibits_CERTIFIED TRANSCRIPT (blue)

The clinical presentation of Sadie Floding is consistent with infection from Salmonella Newport. This is based on history, clinical, imaging and microbiological evidence.

On July 20, 2020 she became ill with diarrhea, nausea, and fatigue. On July 22, 2020, she presented to St. Peter's Hospital Emergency department with bloody diarrhea, fever, abdominal pain and nausea. Stool specimen from 7/23/20 showed Salmonella Newport. CT 7/23/20 showed colitis.

She followed up with her primary care provider, Dr. Diane Nowak. She reports ongoing diarrhea since the incident that has not been treated. This is consistent with post infectious irritable bowel syndrome (IBS). Irritable bowel syndrome post salmonella infection is a well described clinical entity(3).

Thus, based on the history, clinical, epidemiological, imaging (colitis) and microbiological evidence, Ms. Floding's acute symptoms in July and August 2020 and ongoing post-infectious IBS symptoms are consistent with infection from Salmonella Newport to a reasonable degree of medical certainty.

I have also reviewed bills that correspond to her treatment and find that they reflect charges for reasonably necessary medical care.

Future treatment for IBS might include visits to specialists who treat IBS and treatments for IBS such as management of associated psychological disorders, antibiotics, opioid agonists / antagonists, bile acid sequestrants, and antagonists of serotonin 5- hydroxytryptamine type 3 receptors, microbiome treatments such as probiotics, prebiotics, synbiotics as well as fecal microbiota transplantation (10, 11). Even with treatment, it is likely that IBS symptoms will continue indefinitely into the future.

Teischa Benson

Teischa Benson resides in Great Falls, Montana. I have reviewed the following records:

Teischa Benson

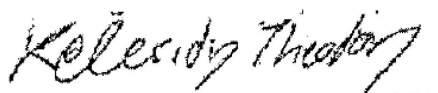
BATES	DESCRIPTION
BENSON0001-BENSON0371	Great Falls Records
BENSON0372-BENSON0381	Great Falls Bills
BENSON0382-BENSON0408	Cascade County Health Dept Records
BENSON0426-516	NORS report
BENSON0517	CDC excel doc
BENSON0518	CDC excel doc
BENSON0519	CDC excel doc
Deposition Transcript	1-10-24 Benson_Bundle with Exhibits_CERTIFIED TRANSCRIPT (blue)

The clinical presentation of Teischa Benson is consistent with infection from an acute infection with Salmonella Newport. This is based on history, clinical, imaging and microbiological evidence. On July 10,2020 she presented with diarrhea, fever, abdominal pain and nausea. Stool specimen from 7/10/20 showed Salmonella Newport. She was prescribed antibiotics and in several days reported resolution of symptoms.

Thus, based on the history, clinical, epidemiological, and microbiological evidence, the symptoms in this case were consistent with infection from Salmonella Newport to a reasonable degree of medical certainty.

I have also reviewed bills that correspond to her treatment and find that they reflect charges for reasonably necessary medical care.

Sincerely,



Theodoros Kelesidis, MD, Msc, PhD
Associate Professor
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Department of Medicine, Division of Infectious Diseases

Cited Literature

1. Hohmann EL. Nontyphoidal Salmonella: UpToDate (last accessed February 2024). 2024.
2. Marchello CS, Birkhold M, Crump JA, Vacc-i NTScc. Complications and mortality of non-typhoidal salmonella invasive disease: a global systematic review and meta-analysis. *Lancet Infect Dis*. 2022;22(5):692-705.
3. McKendrick MW, Read NW. Irritable bowel syndrome--post salmonella infection. *J Infect*. 1994;29(1):1-3.
4. Sejvar J, Lutterloh E, Naiene J, Likaka A, Manda R, Nygren B, et al. Neurologic manifestations associated with an outbreak of typhoid fever, Malawi--Mozambique, 2009: an epidemiologic investigation. *PLoS One*. 2012;7(12):e46099.
5. Garcia Rodriguez LA, Ruigomez A, Panes J. Use of acid-suppressing drugs and the risk of bacterial gastroenteritis. *Clin Gastroenterol Hepatol*. 2007;5(12):1418-23.
6. Hassing RJ, Verbon A, de Visser H, Hofman A, Stricker BH. Proton pump inhibitors and gastroenteritis. *Eur J Epidemiol*. 2016;31(10):1057-63.
7. Carrington AE, Maloh J, Nong Y, Agbai ON, Bodemer AA, Sivamani RK. The Gut and Skin Microbiome in Alopecia: Associations and Interventions. *J Clin Aesthet Dermatol*. 2023;16(10):59-64.
8. Barbara G, Cremon C, Carini G, Bellacosa L, Zecchi L, De Giorgio R, et al. The immune system in irritable bowel syndrome. *J Neurogastroenterol Motil*. 2011;17(4):349-59.
9. von Beek C, Fahlgren A, Geiser P, Di Martino ML, Lindahl O, Prensa GI, et al. A two-step activation mechanism enables mast cells to differentiate their response between extracellular and invasive enterobacterial infection. *Nat Commun*. 2024;15(1):904.
10. Bonetto S, Fagoonee S, Battaglia E, Grassini M, Saracco GM, Pellicano R. Recent advances in the treatment of irritable bowel syndrome. *Pol Arch Intern Med*. 2021;131(7-8):709-15.
11. Camilleri M. Diagnosis and Treatment of Irritable Bowel Syndrome: A Review. *JAMA*. 2021;325(9):865-77.